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NEWS STORIES:

- ↘ National increase in human *Salmonella* Montevideo infections in England and Wales: March to June 2006
- ↘ New emerging norovirus variant
- ↘ *Essential steps to safe, clean care:* reducing healthcare-associated infections
- ↘ *Infection control guidance for care homes*

NEWS STORIES:

Immunisation

- ↘ Laboratory reports of invasive meningococcal infections, England and Wales: weeks 12/06 to 17/06 2006
- ↘ COVER programme: January to March 2006
- ↘ Laboratory confirmed cases of measles, mumps, and rubella, England and Wales: January to March 2006

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News

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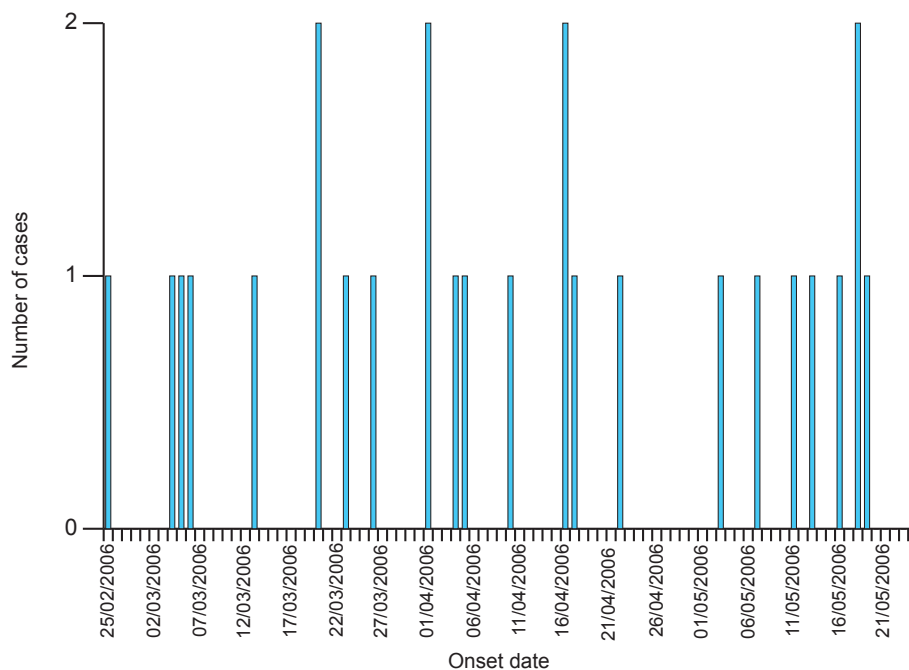
- ▣ National increase in human *Salmonella* Montevideo infections in England and Wales: March to June 2006
 - ▣ New emerging norovirus variant
 - ▣ *Essential steps to safe, clean care: reducing healthcare-associated infections*
 - ▣ *Infection control guidance for care homes*
-

▣ National increase in human *Salmonella* Montevideo infections in England and Wales: March to June 2006

Between the 1 March and the 19 June 2006, the Health Protection Agency (HPA) Laboratory of Enteric Pathogens (LEP) has received isolates from 45 non-travel associated human cases of *Salmonella* Montevideo infection in England and Wales fully sensitive to the LEP panel of antimicrobial drugs. During the same time period in 2005, the LEP received 14 isolates of this infection.

The HPA Environmental and Enteric Diseases Department (EEDD) has been liaising closely with HPA Local and Regional Services (LaRS) to gather epidemiological and demographic data on these cases. Information has been received for 34 cases. Reported onset dates for 27 of the 45 cases between 25 February and 24 May 2006 are shown in figure 1.

Figure 1 Epidemic curve (N=27) of human *Salmonella* Montevideo cases in England and Wales



Of those cases for which information has been received by the HPA's Centre for Infections, over half (22/42; 52%) of the cases are aged under four years. In those aged 4 years or under, one-third (8/22; 36%) are aged 12 months or under. There is no apparent gender difference within all age groups (female 48%, male 52%). With the exception of the North East Region, all HPA regions and Wales are affected (figure 2).

Figure 2 Geographical distribution of cases (N=40)



Molecular typing by pulsed-field gel electrophoresis (PFGE) has identified a putative outbreak strain with a PFGE designation of SmvdX07. The HPA LEP and EEDD are continuing microbiological and epidemiological investigations into this increase.

Please contact Richard Elson (tel: 0208 327 6214 email: richard.elson@hpa.org.uk) with details of suspected cases, or any other information, that may be linked to this national increase.

New emerging norovirus variant

The Virus Reference Department (VRD) at the HPA's Centre for Infections, has recently reported an increasing proportion of norovirus outbreaks caused by a new variant of the genogroup II.4 [Bristol/1993/UK (Grimsby)] strain of the virus. Capsid sequencing indicates conserved amino acid changes within the virus capsid, which defined this new variant, when compared to other strains of this genotype such as Farmington Hills and Hunter 284 strains, the latter being the most predominant strain until the end of 2005. The new variant was first detected in December 2005. Table 1 shows the number of outbreaks sampled in the UK up to May 2006. In April and May 2006, the proportion of all genogroup II.4 strains that were identified as new variant was 27/93 (29%) and 36/63 (57%) respectively. This new variant has also been reported from The Netherlands, France, and Denmark. In recent weeks, several cruise ship outbreaks have been reported in the UK media and elsewhere in Europe. Outbreak strains from two of the cruise ship outbreaks have been identified as the new variant.

Table Emergence of a new GII-4 variant strain associated with outbreaks of gastroenteritis in the UK in 2006

2006	Total No. OB referred	Total No. genotyped	% Typed	Total GII-4	% Type identified as GII-4	Total GII-4 variant	% GII-4 typed as variant
January	184	63	34.2	47	74.6	4	8.5
February	257	63	24.5	52	82.5	8	15.4
March	218	109	50.0	94	86.2	23	24.5
April	208	97	46.6	93	95.9	27	29.0
May	145	68	46.9	63	92.6	36	57.1

The HPA's Environmental and Enteric Diseases Department (EEDD) and VRD are currently reviewing the epidemiological and microbiological information and trying to find out more about these outbreaks. A notification has been sent out through the Regional Epidemiologists and gastrointestinal illness leads in HPA regions as well as through the Clinical Virology Network to achieve comparable datasets from 2005 and 2006 to investigate these outbreaks in more detail. The aim is to compare outbreaks caused by the new variant to the outbreaks caused by the other variants. This seasonal pattern is unusual as norovirus outbreaks normally decline by the summer. Unusual seasonal patterns occurring in the past have coincided with the emergence of novel strains [1], further investigations are needed to explore whether this new variant of the genogroup II.4 strain is likely to emerge as the predominant outbreak strain.

References

1. Lopman B, Vennema H, Kohli E, Pothiere P, Sanchez A, Negedro, A, *et al.* Increase in viral gastroenteritis outbreaks in Europe and epidemic spread of new norovirus variant. *Lancet* 2004; **363**: 682-88.

Essential steps to safe, clean care: reducing healthcare-associated infections

On 15 June 2006, the Department of Health published *Essential steps to safe, clean care*. It forms part of the delivery programme to reduce healthcare-associated infections and is effectively the adaptation of the *Saving Lives: a delivery programme to reduce healthcare associated infection including MRSA* to the non-acute healthcare setting.

It provides a framework for organisations in the non-acute sector (for instance, Primary Care Trusts, Mental Health Trusts, Care Homes, GP practices etc.) to assess themselves and identify areas requiring further attention. Tools are provided for this self assessment, for the production of a balanced scorecard, staff certificates etc. It is available at:

http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4136212&chk=fyaZ0R

Infection control guidance for care homes

The recent publication of *Infection control guidance for care homes* by the Department of Health updates the guidelines on the *Control of Infection in Nursing and Residential Homes*, published in 1996. It was produced in association with the Public Health Medicine Environmental Group, The Infection Control Nurses' association, and Chartered Institute of Environmental Health. It aims to ensure that all reasonable steps are taken to protect residents and staff from acquiring infections in care homes. It provides information and guidance on requirements and recommendations to proprietors and people in charge of homes, and to the Commission for Social Care Inspection (CSCI) on the prevention and control of infection. It is available at:

<<http://www.dh.gov.uk/assetRoot/04/13/63/84/04136384.pdf>>.

Immunisation

Last updated: 20 June 2006, Volume 16, No. 25 Next update: 27 July 2006

Immunisation Routine Data Reports

📄 Laboratory reports of invasive meningococcal infections, England and Wales: weeks 12/06 to 17/06 2006

Immunisation Infection Reports

📄 COVER programme: January to March 2006

📄 Laboratory confirmed cases of measles, mumps, and rubella, England and Wales: January to March 2006

📄 Laboratory reports of invasive meningococcal infections, England and Wales: weeks 12/06 to 17/06

	Method of diagnosis			Total reports	Cumulative*
	CSF and blood Culture	Non-culture	Other sites	12/06-17/06	Total to week 17/2006
Group A	–	–	–	–	–
B	68	79	6	153	498
C	5	2	1	3	14
W135	4	–	–	4	10
X	–	–	–	–	–
Y	2	–	–	2	16
29E	–	–	–	–	–
Ungroupable	–	–	–	–	–
Ungrouped	–	5	–	5	15
Total	79	86	–	167	553

*Latex antigen, microscopy, polymerase chain reaction combined Health Protection Agency Centre for Infections data and Meningococcal Reference Unit data.

COVER programme: January to March 2006

Quarterly vaccination coverage statistics for children aged up to five years in the United Kingdom.

This report of the Cover of Vaccination Evaluated Rapidly (COVER) programme presents quarterly coverage data for children in the United Kingdom (UK) who reached their first, second, or fifth birthday during the evaluation quarter, January to March 2006.

Children who reached their first birthday in the quarter would have been scheduled to receive their third-dose primary vaccinations (third-dose diphtheria, tetanus, pertussis (DTP vaccine), *Haemophilus influenzae* type b (Hib vaccine), polio vaccine, and MenC vaccine) between May and July 2005. Children who reached their second birthday would have been scheduled to receive their third-dose primary vaccinations between May and July 2004 and first measles, mumps, and rubella (MMR) vaccination between January and July 2005. Children who reached their fifth birthday would have been scheduled to receive their third-dose primary vaccinations between May and July 2001, their first MMR between January and July 2002, their pre-school diphtheria, tetanus, acellular pertussis (DTaP) booster, polio, and second-dose MMR from May 2004 onwards.

This is the third quarter to evaluate children at 12 months who have been routinely scheduled for the Pediacel® vaccine (commonly referred to as '5 in 1' vaccine containing DTaP/IPV/Hib) for their whole primary course.

Methods

Methods of data collection for COVER, sentinel MMR coverage, and neonatal hepatitis B vaccination coverage are described on the HPA website.

http://www.hpa.org.uk/infections/topics_az/vaccination/cover_methods.htm.

Results

Data were received from all Health Boards (Scotland and Northern Ireland), Administrative Regions (Wales) (PCT/HB/AR), and Regions (England) (tables 1 and 2). Data were received from 293/303 (97%) PCTs in England. Nine of the 31 PCTs in London were unable to submit data and two submitted partial data this quarter. In 8/9 this is due to ongoing problems relating to the implementation of new child health systems. For eight of the nine, the problems related to PCTs using Child Health Interim Applications (CHIA) have been reported previously, and an additional PCT is implementing a different new system [1, 2]. Coverage for London published this quarter should, therefore, be interpreted with caution. Coverage for all antigens at all ages are always significantly lower in London compared to all other regions in England and the devolved administrations. If coverage for England and the UK were calculated omitting these PCTs, coverage would spuriously rise which would be misleading. Consequently the figures for England and UK have been omitted from this report, as they have from the previous two COVER quarterly reports [1, 2]. It is planned to publish England and UK figures and complete London data retrospectively for this quarter and the previous quarter when these data become available.

Coverage at 12 and 24 months

One hundred and seven out of 293 participating English PCTs (37%) achieved at least 95% coverage at 12 months for three doses of diphtheria, tetanus, pertussis, polio, and Hib vaccine (DTaP/IPV/Hib3) and 104/293 (36%) for three doses of MenC vaccine (MenC). All countries and all English regions except London achieved at least 90% coverage at 12 months for DTaP/IPV/Hib. All countries and 7/9 English regions (all but London and East Midlands) achieved at least 90% coverage at 12 months for MenC. One hundred and sixty-five PCTs (56%) achieved at least 95% coverage at 24 months for DT3 and Hib 3, 161 (55%) for Pol3 and P3, and 150 (51%) for MenC. Only two English PCTs reached 95% coverage for MMR at 24 months.

Comparisons with the previous quarter can only be made at English region and devolved administration level.

Coverage at 12 months for DTaP/IPV/Hib3 increased by between 0.1% and 0.7% in Northern Ireland, Scotland, Wales, and all English regions except for London and South West

(table 1) [1]. MenC coverage increased in all areas apart from East Midlands, London, and the South West.

Coverage for MMR at 24 months increased in all regions between 0.1% and 1.6%. MMR coverage was highest in Scotland and Northern Ireland, both achieving 90.9%; coverage for English regions (excluding London) and Wales ranged from 84.8% to 87.3%. Increases in coverage of all other antigens evaluated at 24 months, of 0.1%-0.9%,

were reported by all regions except for North East (a decrease in both pertussis and Hib coverage), West Midlands (a fall in MenC coverage), and Wales (table 2) [1].

Table 1 Completed primary immunisations (all antigens) by 12 months: January to March 2006

Region/Country	PCT/HB/AR* (total)	DTaP/IPV/ Hib3 %	MenC %
Regions of England			
North East	16 (16)	93.6	93.5
North West	42 (42)	92.6	92.7
Yorkshire and the Humber	34 (34)	92	91.7
East Midlands	28 (28)	92.4	89.5
West Midlands	30 (30)	92.4	92.8
East of England	41 (41)	93.9	93.4
London	22 (31)	83.2	82.7
South East	49 (49)	92	91.7
South West	32 (32)	94.1	94.1
England (Total)	293 (303)	n/a	n/a
Wales	3 (3)	95.2	94.8
Northern Ireland	4 (4)	95.7	96
Scotland	15 (15)	96.4	96.1
United Kingdom	315(325)	n/a	n/a

*PCTs/health boards/administrative regions
n/a = not available

Table 2 Completed primary immunisations (all antigens) by 24 months: January to March 2006

Region/Country	Reports* (total)	DTPol3 %	P3 %	Hib3 %	MenC %	MMR1%
Regions of England						
North East	16 (16)	95	94.8	94.8	95.1	87.3
North West	42 (42)	95.5	95.2	95.2	95.3	87
Yorkshire and the Humber	34 (34)	94	93.8	93.9	93.4	86.2
East Midlands	28 (28)	96.4	96.2	96.1	94.8	88.4
West Midlands	30 (30)	95.1	95	94.8	95	85.9
East of England	41 (41)	95.2	95	95	94.8	85.6
London	22 (31)	88.6	88.6	88.3	88	73.8
South East	49 (49)	93.7	93.4	93.5	93.3	84.8
South West	32 (32)	95.9	95.7	96	95.8	87.1
England (Total)	293 (303)	n/a	n/a	n/a	n/a	n/a
Wales	3 (3)	96.3	95.9	95.9	96	86.3
Northern Ireland	4 (4)	97.3	97.2	97.2	97.3	90.9
Scotland	15 (15)	97.5	97.4	97.3	96.9	90.9
United Kingdom	315 (325)	n/a	n/a	n/a	n/a	n/a

*Reports from PCTs/health boards/administrative regions.
n/a = not available

Retrospective data for 2005/6 was submitted by 2/10 London PCTs (Barking and Dagenham and Havering) which have been using a new interim child health system, CHIA, and which had not submitted data for the past 2 quarters. These data will be published on the HPA website shortly. Both PCTs show a progressive falling trend in coverage over the four quarters, with DTaP/IPV/Hib3 coverage at 12 months falling by between 10% and 19% and MMR1 at 24 months falling by between 7% and 10%.

Coverage at 5 years

Data were received from 315 localities, in England (293/303), Scotland (15/15) Northern Ireland (4/4), and Wales (3/3). Scotland reported coverage at 5 years for the first time (previous reports have been for children turning 6 years old). Compared to last quarter, five year coverage increased (between 0.2% and 0.7%) for DTPol3, P3, and Hib3 in all English regions. Men C coverage increased in 7/9 English regions (except for West Midlands and East of England). Coverage of all primary antigens except MMR1 increased in Wales, remained the same in Scotland and fell in Northern Ireland. Coverage of MMR1 decreased in all regions except for Northern Ireland and Scotland (excluding London) by 0.3% to 2.7%. Coverage of MMR2 decreased in most regions excluding London (by 0.2% to 2.2%); it increased in Yorkshire and the Humber, West Midlands, Northern Ireland, Wales, and Scotland (table 3) [1]. Coverage of the pre-school DTaP/Pol booster increased or remained the same in ten of the twelve devolved administrations/English regions.

Table 3 Completed primary immunisations (all antigens) by 5 years: January to March 2006

Region/Country	Reports* (total)	DTPol3 %	P3 %	Hib3 %	MenC %	MMR1 %	MMR2 %	DTPol4 %
Regions of England								
North East	16 (16)	96.2	95.6	95.8	95.5	89.8	78.2	84.8
North West	42 (42)	95.5	95	94.6	94.9	88.3	76.1	82.2
Yorkshire and the Humber	34 (34)	94.9	94.5	94.2	93.2	88.7	76	80.4
East Midlands	28 (28)	96.4	96.1	96.2	94.8	89.7	76.9	83.8
West Midlands	30 (30)	95.6	95.2	94.4	91.7	88.7	77	84
East of England	41(41)	94.4	93.9	94	92.8	82.6	73.4	82.7
London	22(31)	86.2	85.8	85.9	84.5	76.2	57.2	61.9
South East	49(49)	93.7	93.2	93.4	92.4	84.5	72.1	82.9
South West	32 (32)	96.5	95.9	96	95	88	77.9	87
England (Total)	293(303)							
Wales	3 (3)	95.7	94.8	95.4	94.9	86.7	74.6	84.9
Northern Ireland	4 (4)	97.2	96.7	96.2	96	95	86.5	89
Scotland 6 years†	15 (15)	98.5	98.2	97.6	97.5	93.1	81.3	86.9
England, Wales, and Northern Ireland	300(310)	n/a	n/a	n/a	n/a	n/a	n/a	n/a

*Reports from PCTs/health boards/administrative regions.
n/a = not available

MMR sentinel surveillance scheme coverage

Data collected from March to May 2006 for children in the four age cohorts is summarised in table 4. The range for the three months was from 70.9% to 71.5%, at 16 months, 78.9% to 80.2% at 20 months, 83.7% to 83.9% at 24 months, and 85.4% to 86.6% at 36 months). Over the last six months at 16 months sentinel MMR estimates have declined. For methods of data collection, visit the cover data methods section on the HPA website <http://www.hpa.org.uk/infections/topics_az/vaccination/cover_methods.htm>.

Table 4 Monthly sentinel estimates of measles, mumps, and rubella (MMR) coverage at 16, 20, 24, and 36 months: March to May 2006

Evaluation month	Number of PCTs/trust	Age at vaccination			
		16 months	20 months	24 months	36 months
March 2006	39	71	80.2	83.9	85.8
April 2006	39	70.9	78.9	83.9	85.4
May 2006	39	71.5	80.2	83.7	86.6

Hepatitis B vaccine coverage data in England

The data presented below represents coverage for three doses of hepatitis B vaccine in those infants born to HBsAg positive mothers who reached the age of one year in this quarter (ie, those born between January and March 2005), and coverage of four doses of vaccine in infants who reached two years of age (ie, those born between January and March 2004).

Table 5 Neonatal hepatitis B coverage in England: January to March 2006

Region	Returns with data	12 month denominator	Coverage at 12 months	24 month denominator	Coverage at 24 months
North East	12	1	100%	1	100%
North West	27	29	83%	26	54%
Yorkshire & the Humber	21	26	81%	26	77%
East Midlands	17	8	100%	2	100%
West Midlands	25	44	66%	28	50%
East of England	20	16	69%	13	15%
London	15	148	87%	91	69%
South East	41	17	53%	18	56%
South West	21	9	67%	3	33%
Total	199	298	80%	208	61%

Data were received for 199 PCTs in England, an 8% decrease on the 216 reporting last quarter [1]). Coverage in one year old children reached 80% overall (table 5). Although this is lower than the coverage obtained for routine antigens at this age, the population at risk are highly mobile and high uptake is difficult to achieve [4-10]. The largest number of infants at risk is in London, and coverage in London region was 87%, 6% lower than the coverage reported last quarter possibly because an additional London PCT has reported, which has lower coverage than other areas. Coverage in England for four doses in those aged 24 months was lower at 61%, a decrease of 4.3% on last quarter [1]). As data systems may have only recently been established in some areas, it is likely that 24 month data is less complete and, therefore, this represents an under-estimate of coverage at this age.

Comment

Routine COVER and sentinel MMR

Encouraging increases in coverage have been seen in many regions and for most of the vaccines in the national vaccination programme. Wales has exceeded the 95% target for DTP at 12 months for the first time in over a decade. The increase in MMR coverage at 24 months may reflect the increasing confidence in MMR observed over the recent years. In contrast, the lower MMR1 and MMR2 coverage in the 5 year old cohort of children in routine COVER and in the sentinel surveillance scheme are concerning, especially in the current context of increasing cases of measles and outbreaks (measles, mumps, and rubella England and Wales: January to March 2006). Now that public and media confidence in MMR appear to be increasing, it may to be a good time for the NHS to take

action to improve MMR coverage, for example by informing parents that it is never too late to give their children MMR and by ensuring that vaccination status is checked at the pre-school booster and at school entry to identify unprotected children.

This is the third quarterly report in which national trends could not be reported due to problems with new child health systems being implemented in London. Comparing the year 2005/6 to 2004/5, the number of children in London who are missing from the COVER programme is nearly 18,000 for children turning 12 months, over 14,500 for children turning 24 months and nearly 19,000 for children turning 5 years of age. These children are not necessarily unvaccinated, but the fact that no information has been collected on their vaccination status means that those who have missed out vaccines for whatever reason are unlikely to have been identified and followed-up. Child Health Systems were created to help manage the national vaccination programme at the local level in the 1980s. The systems were very successful in achieving greatly improved vaccination coverage in the UK through sending invitations for vaccination, identifying unvaccinated children, sending reminders and tracking their status for catch-up campaigns. If new child systems fail to deliver these functionalities then children risk missing out on vaccination. Thus, they remain unprotected and eventually will catch measles, mumps, and rubella infections. Ten of the 31 London PCTs are using CHIA, a system provided by BT which is the London provider for Connecting for Health, the agency delivering the NHS National Programme for IT. The trend observed in the data of the two CHIA PCTs which submitted data this quarter is worrying, with a consistent fall in coverage of between 7% and 10% for MMR and up to 19% for DTaP-Hib-IPV during the past year in which the child health systems have been non-functional. Falls in coverage of this magnitude not only indicate that individual children may be at risk, but also represent a potential major public health threat to the control of the diseases in the community. Action is being taken to investigate whether the apparent fall just reflects data quality problems or if it is a true fall in coverage which would require all children affected by the disruption to child health services in London to be identified and offered vaccination.

A variety of problems persist with other new child health systems. These include continual problems reporting in the correct format for the system implemented in the East of England region by Accenture which, as reported previously had difficulties generating reports when it was first implemented [2, 3].

As other new child systems are implemented in other regions of the country as part of Connecting for Health, lessons need to be learnt to avoid similar problems occurring as have happened in Eastern and London regions. Child health systems are pivotal to the good local management of the national vaccination programme, to ensure the protection of children and to protect the public health.

Neonatal hepatitis B vaccination

Around 94 PCTs were unable to provide data this quarter, an increase on the previous quarter, and many PCTs that sent in returns had zero cases in this period. It is unclear whether these zero returns represent valid data for areas with a low prevalence of infection or missing data. PCTs reporting no infants at risk are urged to review their data to ensure that information is being correctly recorded. It should be possible to estimate the number of infants at risk from HBsAg prevalence in the local antenatal population. PCTs that were unable to submit data are asked to urgently review the systems for obtaining this data so that this important group of infants can be monitored prospectively.

Relevant links for country specific coverage data

Wales

<<http://www.wales.nhs.uk/sites/page.cfm?OrgID=368&PID=2278>>

Scotland

<<http://www.show.scot.nhs.uk/scie/h/>>

Northern Ireland

<<http://www.cdscni.org.uk/surveillance/Coveragestats/default.asp>>

England

<<http://www.publications.doh.gov.uk/public/sb0416.htm>>.

Other relevant links

<http://www.hpa.org.uk/infections/topics_az/vaccination/vac_coverage.htm>

<<http://www.mmrthefacts.nhs.uk/>>

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Laboratory confirmed cases of measles, mumps, and rubella, England and Wales: January to March 2006

Data presented here is for the first quarter of 2006 (ie, January to March 2006). Cases include those confirmed by oral fluid IgM antibody tests and routine laboratory reports (table 1). Analyses are by date of onset. Regional breakdown figures relate to Government Office Regions rather than regional health authorities (pre-April 2002 definitions) as used previously in this section. Quarterly figures for cases confirmed by oral fluid antibody detection only from 1995 are available from:

http://www.hpa.org.uk/infections/topics_az/measles/data_not_confirmed.htm

http://www.hpa.org.uk/infections/topics_az/mumps/data_quarter.htm

http://www.hpa.org.uk/infections/topics_az/rubella/data_rub_not.htm

and annual total numbers of confirmed cases by health region and age from:

http://www.hpa.org.uk/infections/topics_az/measles/data_reg_age.htm

http://www.hpa.org.uk/infections/topics_az/mumps/data_reg_age.htm

http://www.hpa.org.uk/infections/topics_az/rubella/data_reg_age.htm

Table 1 Total confirmed cases of measles, mumps, and rubella, and oral fluid IgM antibody tests in cases notified to ONS*: weeks 01-13/2006

	Cases			Oral fluid†	IgM antibody	Results		
	Notified	Tested	%	Total positive	Recently vaccinated	Confirmed	Other lab confirmed	Total confirmed cases
Measles	719	704	98%	119	12	107	74	181
Mumps	5781	3148	54%	1666	22	1644	638	2282
Rubella	313	251	80%	1	1	–	10	10

*ONS = Office for National Statistics

†Some oral fluid specimens were submitted early from suspected cases and may not have been subsequently notified, thus the proportion tested is artificially high for this quarter.

As previously reported, the cohort at an increased risk of mumps because they have either received no measles, mumps, and rubella (MMR) vaccine, or only one dose were born between 1981 and 1990 [1]. In 2004, the number of notified cases and the proportion of oral fluid samples tested and confirmed increased dramatically. From February 2005, the Health Protection Agency (HPA), recommended that, during this period of increased mumps incidence, oral fluid samples should not be taken from individuals with clinical mumps who were born between 1981 and 1986, and that they should be managed as if they were a confirmed case [2]. In January 2006, this recommendation was changed and it is now recommended that cases in all age groups should be confirmed by oral fluid testing [3].

Measles

One hundred and eighty-one cases of confirmed measles with onset dates in the first quarter of 2006 were reported. This compares to a total of seventy eight confirmed cases in the whole of 2005. One hundred and thirty-one were in children aged under 15 years (13 aged under 1 year, 60 aged between 1 to 4 years; 32 aged between 5 and 9 years; and 26 aged between 10 to 14 years), and 50 in adults aged 15 years and over. Fifteen cases (8.6%) had a documented history of measles-containing vaccines: four had received one dose of single measles vaccine, eight had received one dose of MMR, and one child had received two MMRs, although the receipt of the second dose was not confirmed. The two remaining children had received MMR after exposure to a confirmed case but, despite this, developed clinical measles in the following two weeks.

Cases were reported from all regions except the North East (East of England 21, London 34, North West 18, West Midlands 11, East Midlands 13, Yorkshire and the Humber 35, South East 43, South West 4, and Wales 2). Eight cases had a history of recent travel, three to Pakistan (a D4 strain was identified in one of these cases), one to Somalia (a D4 strain was identified), one to Italy (a D6 strain was identified) and one each to Kazakhstan, Thailand, and South Africa but there was no suitable sample available for genotyping. One hundred and thirteen cases were associated with 26 clusters of between two and 41 cases; 16 of these clusters were associated with known cases in the travelling community. A B3 genotype was identified in one or more case from 15 clusters, D4 from two clusters and D8 and D6 each from one cluster.

Mumps

Two thousand two hundred and eighty-two cases of mumps with onset dates in the first quarter of 2006 were laboratory confirmed. This compares to 4259 confirmed or assumed confirmed in the fourth quarter of 2005 (3). Notified cases decreased only slightly this quarter from 5902 to 5781. A total of 56,390 cases of mumps were notified in 2005, with 43,359 cases either laboratory confirmed or assumed to be genuine mumps due to their age [2].

Table 2 Laboratory confirmed cases of mumps by age group and region, England and Wales: weeks 01-13/2006

Region	Age group								Total
	<1y	1-4y	5-9y	10-14y	15-19y	20-24y	≥20y	NK	
North East	–	1	–	3	23	17	21	–	65
North West	1	3	3	18	66	109	45	–	245
Yorkshire and the Humber	–	4	6	21	104	81	41	3	260
East Midlands	–	4	1	3	48	55	37	1	149
West Midlands	–	4	5	8	89	64	34	2	206
East of England	–	4	5	23	106	59	44	3	244
London	–	–	1	14	145	136	65	5	366
South East	–	4	9	22	184	149	86	4	458
South West	–	2	2	10	45	36	20	–	115
Wales	–	–	2	10	67	42	22	2	145
Not known	–	–	–	2	12	9	6	–	29
Total	1	30	38	143	914	787	434	21	2282

Rubella

Ten confirmed cases of rubella were reported in this quarter. One was a one year old child and the remaining nine were in adults (five males and four females aged between 25 and 53 years) – none were known to be pregnant. Rubella remains a rare disease in England and Wales with only 29 confirmed cases during 2005.

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